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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,497

03/27/2006

Yasutsugu Soeta

127462

9335

25944 7590 12/03/2008
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EXAMINER

NGUYEN, DUNG V

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

12/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,497	SOETA, YASUTSUGU	
	Examiner	Art Unit	
	Dung Van Nguyen	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15,17,19,21,23,25,27,29,31,33,35 and 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15,17,19,21,23,25,27,29,31,33,35 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9-2-2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claims 15 and 27, the polishing pad is being structurally defined in part by the area of the substrate that is to be polished, however, the substrate is not positively recited. It's not clear how to form grooves to obtain the average value of the total volume of all the grooves under a substrate when the substrate is not positively cited or known at the time of forming grooves.

Claim Rejections - 35 USC § 102

4. Claims 15, 17, 23, 25, 27, 29 35 and 37, as well as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Muldowney (USPN 6,783,436). Muldowney discloses a polishing pad 100 for polishing a substrate 226 comprising radial pattern grooves 104 formed on a surface 102 of the polishing pad 100 (note Fig. 1 and 5, col. 1, line 66 to col. 2, line 16, col. 3, lines 28-31, col. 4, line 16 to col. 6, line 24, col. 6, lines 45-57).

Claim Rejections - 35 USC § 103

5. Claims 19 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muldowney (USPN 6,783,436). Muldowney discloses the claimed invention as

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described above, Muldowney does not disclose the grooves have width of 2.0 mm or less. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a width of 2.0mm or less, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105, USPQ 233.

6. Claims 21 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muldowney (USPN 6,783,436). Muldowney discloses the claimed invention as described above, Muldowney does not disclose the polishing pad is nonwoven type or suede type. Nonwoven or suede types are old and known material for polishing pad as disclosed by Kuramouchi et al (USPN 6,328,644).

Response to Arguments

7. Applicant's arguments filed 12 September 2008 have been fully considered but they are not persuasive. Applicant argues that regardless of the actual size of the substrate, the grooves for polishing that particular substrate are formed to be within the recited ranges. The argument is not persuasive because although the actual size of the substrate is known, the size and shape of the polishing pad and the groove are unknown or variable. Therefore, the phrase "the groove parts existing immediately below the substrate" renders the claim indefinite, thereby rendering the scope of the claims unascertainable.

8. Applicant argues that Muldowney does not constitute prior art against Applicant's claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Van Nguyen whose telephone number is 571-272-4490. The examiner can normally be reached on PHP Program.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dung Van Nguyen/
Primary Examiner, Art Unit 3723